The Power of Mindsets: Nurturing Student Engagement,

Motivation, and Resilience in Students

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Abstract

In this chapter three interrelated concepts—student engagement, motivation, and resilience—are examined through the lens of "mindsets." Mindsets are assumptions that we possess about ourselves and others that guide our behavior. The mindset that educators hold about the factors that contribute to student engagement, motivation, and resilience determines their expectations, teaching practices, and relationships with students. We identify the key components of these three concepts, highlighting those that overlap. We distinguish between extrinsic and intrinsic motivation and the ways in which the latter is more closely attuned with student engagement and resilience than the former. We encourage the ongoing discussion of mindsets at staff meetings so that teachers become increasingly aware of the mindset of engaged, motivated learners and consider how to nurture this mindset in the classroom. We offer many strategies to facilitate the enrichment of this mindset in all students.

The Power of Mindsets: Nurturing Student Engagement, Motivation, and Resilience in Students

In this chapter we will describe the close link among three interrelated concepts: motivation, student engagement, and resilience. We will examine these concepts through the lens of "mindsets." Mindsets may be understood as assumptions that we possess about ourselves and others that guide our behavior. The mindsets that educators hold about the basic components of motivation and engagement will determine their expectations, teaching practices, and relationships with students (Brooks, 2001; 2004; Brooks & Goldstein, 2001, 2004, 2007; 2008; Goldstein & Brooks, 2007).

The concept of mindsets has become an increasingly prominent area of study, especially with the emergence of the field of "positive psychology." As examples, Carol Dweck authored a book titled *Mindset* (2006) in which she distinguished between a "fixed" and "growth" outlook; the research of Martin Seligman and his colleagues about "learned helplessness," and "learned optimism" as well as resilience (Reivich & Shatte, 2002; Seligman, 1990) have underpinnings in attribution theory, which is basically about mindsets, examining how we understand the reasons for our successes and setbacks (Weiner, 1974).

Educators bring assumptions about student behavior into all of their interactions with those in their classrooms and schools. The more aware they are of these assumptions, the more they can change those beliefs that may work against the creation of a positive classroom environment. Even those assumptions about which we may not be cognizant have a way of being expressed to students. For example, a teacher may be annoyed or frustrated with a child without realizing that the anger is rooted in the teacher's assumption that the child's constant asking of questions is an intentional ploy to distract the class. In addition, the teacher may not be aware that his annoyance is not as disguised as he believes, and is being communicated through facial expressions and tone of voice.

In contrast, another teacher with the same student may assume that the child's ongoing questions represent an attempt to understand the material being presented. This teacher is more likely to express positive verbal and nonverbal messages and to offer assistance, perceiving the child as being vulnerable and motivated rather than being oppositional.

The impact that the mindset of educators has in determining their approach to students and the extent to which they nurture motivation, student engagement, and resilience is apparent in the following example:

Parents of a high school student, John, contacted the first author several years ago. They asked Bob to serve as a consultant to John's school program. An earlier evaluation revealed that John was struggling with learning disabilities and academic demands. When Bob met with John's teachers and requested that they share their perceptions of him, one immediately responded with obvious anger, "John is one of the most defiant, oppositional, lazy, unmotivated, irresponsible students we have at this school!"

Another teacher seemed surprised by the harshness of this assessment. In a manner that maintained respect of her colleague's opinion, she said, "I have a

different view. I think John is really struggling with learning and he feels very vulnerable every day when he enters the school. I think that as a staff we should figure out a different way of teaching him because what we are doing now is a prescription for failure."

In listening to these two descriptions of the same student, one could not help but conclude that the teachers were offering opinions of two distinctly different youngsters. It would not be surprising to discover that these vividly contrasting opinions or mindsets and the teacher behaviors they triggered would likely contribute to John having markedly different mindsets and responses to each of these two teachers. In fact, this was the case.

After the meeting Bob interviewed John and asked him to describe his teachers, not revealing what they had said about him. In describing the teacher who had portrayed him very negatively, John said with noticeable force, "She hates me, but that's okay because I hate her. And I won't do any work in her class."

John continued, "And don't tell me that I'm only hurting myself by not doing work (he must have heard that advice on numerous occasions). What you don't understand, Dr. Brooks, is that in her eyes I am a failure. Whatever I do in her class is never going to be good enough. She doesn't' expect me to pass, so why even try?" He said that from the first day of class he felt "angry vibes" from her.

"She just didn't like me and soon I didn't like her. I could tell she didn't want me in her class just by the way she spoke to me. Right away she seemed so angry at me. I really don't know why she felt that way. So after a while I knew there was no way I could succeed in her class so I just decided that I wouldn't even try. It would just be a waste of time. She told me I was lazy, but if she was honest she would have to admit that she doesn't think I could ever get a good grade in her class."

John's face lit up as he described the teacher who thought that the primary issues that should be addressed were his struggles with learning and his sense of vulnerability. He said, "I love her. She went out of her way the first week of school to tell me something. She said that she knew I was having trouble with learning, but she thought I was smart and she had to figure out the best way to teach me. She said that one of the reasons she became a teacher was to help all students learn. She's always there to help."

In hearing John's perception or mindset of these two teachers, it is not difficult to appreciate why he was a discipline problem with the first teacher but not the second. His behavior with each of them reflected what he believed were their mindsets and expectations for him. We recognize that it typically takes "two to tango" and most likely at some point John bore some responsibility for adding fuel to the "angry vibes," thereby confirming the first teacher's negative perceptions of him. However, it is essential for educators to identify and modify those features of their mindset that work against student motivation and student engagement and serve as barriers to students becoming more optimistic and resilient.

Guiding Questions for Consideration

Given the power of mindsets in determining the social-emotional and learning climate created in classrooms, several key questions can be raised:

- What are the characteristics of the mindset of students who are motivated and engaged?
- What are the characteristics of the mindset of resilient students? How do resilient students see themselves differently from their peers who are not resilient? In what ways does a "resilient mindset" overlap with the mindset of motivated, engaged students?
- What are the characteristics of the mindset of educators who are most effective in nurturing motivation, engagement, and resilience in students?
- What specific strategies or interventions can teachers with positive mindsets develop and implement to nurture motivation, engagement, and resilience in their classrooms?

To answer these questions, one must also examine the following related question: What are the main components housed in the concepts of motivation, student engagement, and resilience?

Characteristics of Students

The Mindset of Engaged, Motivated Students

Goldstein and Brooks (2007) have identified five major characteristics of the mindset of motivated students. They include:

- 1. To perceive the teacher as a supportive adult. We place this first to capture the essential relationship that teachers form with students in promoting motivation. As has often been expressed, "Students don't care what you know until they first know you care." Motivated students feel that teachers genuinely care about them as individuals and want them to learn and to succeed (Klem & Connell, 2004; McCombs & Pope, 1994; Middleton & Pettit, 2010; Wagner, Kegan, Lahey, & Lemons, 2005). When struggling with an academic task or with nonacademic issues, the successful student feels comfortable in taking the initiative and asking the teacher for assistance. They do not perceive requesting help as a weakness, but rather as an integral feature of the classroom environment.
- 2. To believe that whether they learn as students is based in great part on their own motivation, perseverance, and effort (Adelman & Taylor, 1983; Brooks, 1991; Deci, Hodges, Pierson, & Tomassone, 1992; DiCintio & Gee, 1999; Seligman, 1995; Weiner, 1974). This does not minimize the role that teachers play, but if students do not view themselves as active participants in the learning process, but rather as passive recipients of what is being taught, their interest, enthusiasm, and involvement for learning will be greatly diminished.
- 3. To recognize that making mistakes and not immediately comprehending certain concepts or material are expected features of the learning process. Students who persist when confronted with challenging learning tasks, are those who believe that mistakes serve as the basis for future learning, that mistakes invite new learning strategies (Andrews & Debus, 1978; Canino, 1981; Dweck, 1986, 2006). This outlook is in sharp contrast to students who interpret their mistakes as an indication that they are not very intelligent and thus, they are incapable of correcting the situation. If they believe that any

efforts they make to learn will not eventuate in success, they will not persevere in that activity, demonstrating what Seligman (1990) labeled as "learned helplessness

- 4. To have a clear understanding of their learning strengths and learning vulnerabilities. It is essential that learning strengths and vulnerabilities be identified for students (Levine, 2003). As students gain insight into their learning profile, the more they can develop and apply effective strategies to learn successfully (Schunk & Rice, 1993). When students don't understand why they are struggling with learning or when they believe they are dumb or stupid or lazy, they are more vulnerable to engage in self-defeating ways of coping represented by non-compliant behaviors.
- 5. To treat classmates with respect and avoid teasing or bullying, recognizing that such behaviors work against a positive school climate and adversely affect the learning of all students (Davis, 2003; Olweus, 1994). Students must realize that maintaining a caring, respectful classroom and school is the responsibility of each member of that classroom and school.

The Mindset of Resilient Children and Adolescents

Brooks and Goldstein (2001) have defined resilience as the capacity to cope effectively and positively with past or present adversity. They have identified the outlook and skills associated with a "resilient mindset." They include:

- 1. To be able to set realistic goals and expectations for themselves.
- 2. To believe that they have the ability to solve problems and make thoughtful decisions and thus are more likely to view mistakes, setbacks, and obstacles as challenges to confront rather than as stressors to avoid.
- 3. To rely on effective coping strategies that promote growth and are not self-defeating.
- 4. To be aware of and not deny their weaknesses and vulnerabilities. They do not view these vulnerabilities as flaws but rather as areas for improvement. They also realistically accept when certain tasks may be beyond their abilities at the present time but open to change in the future.
 - 5. To recognize, enjoy, and engage in their strong points and talents.
- 6. To possess a self-concept that is filled with images of strength and competence or what we have referred to as "islands of competence" (Brooks. 2004; Brooks & Goldstein, 2001).
- 7. To feel comfortable relating with others and to rely on effective interpersonal skills with peers and adults alike. This enables them to seek out assistance and nurturance in a comfortable, appropriate manner from adults who can provide the support they need.
- 8. To believe that there is a purpose to their existence, that they are making a positive difference in the lives of others.
- 9. To define the aspects of their lives over which they have control and to focus their energy and attention on those rather than on factors over which they have little, or any, influence.

Numerous researchers and clinicians have studied and articulated different features of this mindset (Masten, 2001; Masten & Coatsworth, 1998; Rutter, 1987; Seligman, 1995; Sheridan, Eagle, & Dowd, 2005; Shure, 1996, 2003; Werner & Smith, 1992, 2001; Wright & Masten, 2005). As will be apparent many of these features overlap with those associated within the mindset of motivated learners.

It is our belief that educators can nurture mindsets associated with increased motivation, engagement, and resilience as a natural part of their classroom teaching practices. It is important to note that reinforcing social-emotional skills should not be perceived as an "extra curriculum" that ciphers already limited time from teaching academic subject matter. In fact, our position is that the more secure and engaged students are, the more motivated they will be to meet academic requirements.

Let's turn now to examining the concepts and components of motivation and student engagement before identifying the mindset and practices of teachers who are skilled in nurturing these qualities in students.

Motivation, Student Engagement, and Resilience Motivation: Intrinsic or Extrinsic—Autonomous or Controlled

There is no simple answer to the question, "What is the relationship between student engagement and motivation?" As we shall see not only is the concept of student engagement multi-dimensional (Appleton, Christenson, & Furlong, 2008; Appleton, Christenson, Kim, & Reschly, 2006; Christenson & Anderson, 2002), but so too is motivation, which without wishing to simplify things has primarily been cast as residing in two broad camps, namely, motivation that is intrinsically or extrinsically driven.

To capture the key dimensions of intrinsic and extrinsic motivation, psychologists Edward Deci and Richard Ryan at the University of Rochester in New York have advanced "self-determination theory" (SDT) (Deci & Flaste, 1995; Deci, Koestner, & Ryan, 2001; Deci & Ryan, 2000). Instead of the words intrinsic and extrinsic they prefer to use the concepts autonomous and controlled.

They distinguish autonomous from controlled in the following way (Deci & Flaste, 1995):

To be autonomous means to act in accord with one's self—it means feeling free and volitional in one's actions. When autonomous, people are fully willing to do what they are doing, and they embrace the activity with a sense of interest and commitment. Their actions emanate from their true sense of self so they are being authentic. In contrast, to be controlled means to act because one is being pressured. When controlled, people act without a sense of personal endorsement. Their behavior is not an expression of the self, for the self has been subjugated to the controls. In this condition, people can reasonably be described as alienated. (p. 2)

As we attempt to understand the relationship between motivation and student engagement and consider the two main types of motivation spotlighted by Deci and Ryan, we might be better served to ask the questions, "Does intrinsic (autonomous) or extrinsic (controlled) motivation contribute more to the enrichment of student engagement? Or, is there any difference at all? Or can aspects of intrinsic motivation be applied even when extrinsic motivation is used?"

We would argue that the variables associated with intrinsic motivation are much more closely aligned with both student engagement and resilience than those embedded within extrinsic motivation. To take this argument a step further, it is our belief that practices predicated upon extrinsic motivation may, at times, actually work against students becoming more engaged with learning tasks or becoming more resilient unless features of intrinsic motivation are incorporated within the practices of extrinsic motivation.

Lepper, Greene, and Nisbett (1973) conducted a study in the early 1970s that generated much dialogue about those factors involved in motivating children to engage in particular activities. Their research is often cited in the literature about motivation, not simply as a result of the topic it examined, but because their findings were counterintuitive to what many anticipated.

Lepper, Greene, and Nisbett observed a preschool class and identified those children who chose to draw during their "free time" play. Then they designed an experiment to discover what happens when you reward an activity that the children already enjoyed doing. The researchers divided the children into three groups. The first was called the "expected-award" group. They showed each of the children in this group a "Good Player" certificate featuring a blue ribbon and the child's name; they told these children that they would receive an award for drawing. The second group was designated the "unexpected award" group. These children were asked if they wanted to draw and if they did, they were given one of the "Good Player" certificates when the session concluded. They did not know in advance that they would receive an award. The third group was the "no award" group. These preschoolers were asked if they wanted to draw, but they were neither promised a certificate prior to drawing nor given one at the end.

Two weeks later the teachers of the preschoolers put out paper and markers during the "free play" period while the researchers secretly observed the students. A central question being studied was whether being involved in one of the three groups two weeks earlier would have any impact on the child's behavior now. If so, what would it be? One prediction was that an award given two weeks earlier would not impact appreciably or at all on the child's behavior today. Another possibility, strongly rooted in what Pink (2009) called "The Motivation 2.0 Operating System," would be that the children who received awards for engaging in drawing would display even greater interest in and motivation to draw since they were rewarded for that behavior. Motivation 2.0 is based on the premise that the way you motivate people to do what you want is to reward them for the behavior you seek and punish them for behavior you do not want to appear. It is predicated on extrinsic motivation.

The tenets of Motivation 2.0 would lead one to assume that those children told in advance they would receive a reward for drawing would be most motivated two weeks later to engage in this activity since it had been rewarded previously. This seemed to be a logical conclusion, based on the notion that providing external rewards for accomplishing particular tasks would increase involvement in these tasks. It was basically the model articulated by famed psychologist B. F. Skinner in which the occurrence of certain behaviors was either increased or decreased by the use of rewards and punishment.

However, what those subscribing to an extrinsic motivation model may have hypothesized was not in keeping with what Lepper, Greene, and Nisbett discovered. Children in the "unexpected-award" and "no award" groups drew just as much and with the same enthusiasm as they had before the experiment. But children in the first group—the ones who had expected and then been given an award—displayed much less interest and spent much less time drawing. Even two weeks later, the prizes—so common in many classrooms—had seemingly transformed play into work. It is important to point out that it wasn't necessarily the rewards themselves that reduced the children's interest since when children didn't expect a reward, receiving one had little impact on their

intrinsic motivation. Only *contingent* rewards—if you do this, then you'll get that—had the negative effect.

The results of this study invite the question of why didn't the so-called "extrinsic motivators" heighten interest in drawing? Also, do the results represent an anomaly not to be replicated in other studies? Pink (2009), in reviewing the literature, cited many other examples of the negative impact of rewarding particular behaviors.

An explanation for these unexpected findings may be found in the position advanced by Deci and Ryan (2000) who contended that there are three basic, innate, psychological needs that we all possess: the need to belong or feel connected, the need to feel competent, and the need for autonomy or self-determination. Deci and Ryan asserted that when these needs are satisfied, motivation and productivity are increased, but when they are not met motivation and satisfaction are diminished.

Ryan observed, "This is a really big thing in management. When people aren't producing, companies typically resort to rewards or punishment. What they haven't done is the hard work of diagnosing what the problem is. You're trying to run over the problem with a carrot or a stick" (Pink, 2009, p. 72). Deci added that self-determination theory does not unequivocally oppose the use of rewards. "Of course, they're necessary in workplaces and other settings, but the less salient they are made, the better" (Pink, 2009, p. 72).

Pink (2009) summarized the limited conditions under which extrinsic motivation may be beneficial. "For routine tasks, which aren't very interesting and don't demand much creative thinking, rewards can provide a small motivational booster shot without harmful side effects. In some ways, that's just common sense (p. 62)." Pink recommended that even routine tasks can be made more enticing by lessening control and introducing autonomy. "Allow people to complete the task their own way. Think autonomy not control. State the outcome you need. But instead of specifying precisely the way to reach it, give them freedom over how they do the job" (2009, p. 64).

Appleton and colleagues (2008) captured the complexity of both SDT and the concepts of extrinsic and intrinsic motivation. They highlighted at least two features of SDT that are especially relevant for educators. First, similar to Pink's contention that even seemingly external demands can be offered in a way that provide a modicum of internal control, SDT posited that in those situations in which the catalyst for behavior is external to oneself, aspects of internal control can be established (Ryan & Deci, 2000). In support of this position Appleton et al. (2008) wrote, "The theory (SDT) specifies qualitative differences in the level of self-determination associated with external motivation; situates these levels along a continuum; and contends that external expectations can be internalized, integrated, and result in highly autonomous functioning" (p. 378).

The second aspect of SDT Appleton et al. (2008) identified that is highly relevant for teaching practices is related to the first feature. It highlighted the importance of contextual factors and suggested that teachers have greater power than they may recognize to accentuate and reinforce autonomous behaviors in the school environment even when external demands appear to dominate the school arena. In the face of educational requirements and curricula that seem fixed or perhaps rigid, teachers are empowered to ask, "How can I implement teaching strategies that integrate intrinsic motivation principles within a more controlled environment?" This question encourages

educators to reflect upon and appreciate the impact they have on enhancing student motivation and engagement even within a more restrictive educational milieu.

Appleton et al. (2008) provided some guidance for moving towards greater autonomy regardless of the environmental restraints. "Educators can facilitate student self-determination with extrinsically motivated tasks by using relationships, setting up students for success in course tasks (via scaffolding of lessons and attention to developmental level), and orchestrating student opportunities for decision making and other authentically autonomous experiences" (pp. 378-379). Support for this position is found in a number of research studies (Grolnick, Ryan, & Deci, 1991; Maehr & Meyer, 1997; Miserandino, 1996; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004).

In considering SDT, Pink (2009) reframed to some extent Deci and Ryan's three basic needs of autonomy, belonging, and competence, casting autonomy as the essential component, but describing "mastery" and "purpose" as two other dimensions of intrinsic motivation. Mastery is viewed as the pleasure that accrues from being engaged in a task that is exciting and challenging. Czikszentmihalyi (1975, 1998) introduced the concept of *flow*, a state in which people are absorbed and challenged by what they are doing. A key quality producing *flow* is the level of the challenge of the task. A task that is either too easy or too difficult given the skills of the individual will not permit the experience of *flow* to emerge.

The concept of *flow* as proposed by Czikszentmihalyi is linked to both motivation and engagement and houses major implications for the teaching style and curriculum presented by teachers. If students are to experience flow, they must be challenged to move beyond their current levels of competence in activities that are interesting and relevant to them and that encourage their input and feedback.

In addition to autonomy and mastery, the third nutriment of motivation emphasized by Pink is purpose, which relates to commitment, meaning and the belief that one's activities are of benefit to others. This sense of purpose and commitment has been identified as a notable feature of resilience (Rutter, 1980; Werner, 1993) and of a resilient mindset (see point #8 above and Brooks & Goldstein, 2001). As we shall see later in this chapter, purpose and commitment also serve as a foundation for becoming stress hardy (Kobasa, Maddi, & Kahn, 1982). Pink (2009) wrote, "Autonomous people working toward mastery perform at very high levels. But those who do so in the service of some greater objective can achieve even more. The most deeply motivated people—not to mention those who are mot productive and satisfied—hitch their desires to a cause larger than themselves" (p. 133).

Earlier we expressed our position that in comparison with extrinsic or controlled motivation, the components of intrinsic or autonomous motivation were most in accord with nurturing resilient, engaged students. Let us turn our attention to the concept of "student engagement" to understand the basis for this position.

Student Engagement: A Multi-dimensional Concept

Christenson and her colleagues articulated the various dimensions of engagement in schools and developed the Student Engagement Instrument (SEI) (Appleton et al., 2008; Anderson, Christenson, Sinclair, & Lehr, 2004; Appleton et al., 2006; Christenson et al. 2008). They noted that the distinction between motivation and engagement remains an ongoing issue. As a point of illustration they identified one conceptual framework in which motivation is cast in terms as the direction and intensity of one's energy (Maehr &

Meyer, 1997). In this framework motivation is linked to underlying psychological processes such as autonomy, belonging or connectedness, and competence and is perceived to answer the question of "why" for a given behavior.

In contrast, engagement has been described as "energy in action, the connection between person and activity" (Russell, Ainley, & Frydenberg, 2005, p.1), and reflects a person's active involvement in a task or activity. Appleton et al. (2006) wrote, "Although motivation is central to understanding engagement, the latter is a construct worthy of study in its own right" (p. 428).

Engagement, achievement, and school behavior were found to be associated with each other. Low student engagement heightened the likelihood of students dropping out of school. Check & Connect is one illustration of a targeted intervention program designed to promote student engagement (Appleton et al., 2006; Christenson & Thurlow, 2004; Sinclair, Christenson, & Thurlow, 2005). Key components of Check & Connect are closely related to the features of a resilient mindset, perhaps the most important of which is a mentor who works with students and their families for a minimum of two years. Mentors promote problem-solving skills, persistence, and learning within a supportive relationship. Mentors also focus on nurturing their mentee's sense of autonomy, belonging, and competence, which parallel the main ingredients of SDT proposed by Deci and Ryan (2000).

Finn (1989) advanced the view that engagement can be conceptualized as being comprised of two main components, behavioral (e.g., participation in school activities) and affective (e.g., identifying oneself with the school, having a sense of belonging and connectedness). More recent reviews of the literature have posited that engagement is made up of three variables: behavioral (e.g., appropriate demeanor, effort, active participation), cognitive (e.g., self-regulation, developing and adhering to learning goals), and emotional or affective (e.g., showing an interest in and positive attitude towards learning, having a sense of belonging and connectedness) (Fredricks, Blumenfeld, & Paris, 2004; Jimerson, Campos, & Greif, 2003).

Christenson and her colleagues (Betts, Appleton, Reschly, Christenson, & Huebner, 2010; Christenson & Anderson, 2002; Reschly & Christenson, 2006) proposed a taxonomy for defining student levels of engagement as well as for identifying the goodness-of-fit between the student, the learning environment, and factors that impact upon the fit. They viewed engagement as comprised of four subtypes: academic, behavioral, cognitive, and psychological. Appleton et al. (2006) elaborated on this taxonomy:

There are multiple indicators for each subtype. For example, academic engagement consists of variables such as time on task, credits earned toward graduation, and homework completion, while attendance, suspensions, voluntary classroom participation, and extra-curricular participation are indicators of behavioral engagement. Cognitive and psychological engagement includes less observable, more internal indicators, such as self-regulation, relevance of schoolwork to future endeavors, value of learning, and personal goals and autonomy (for cognitive engagement), and feelings of identification or belonging, and relationships with teachers and peers (for psychological engagement). (p. 419)

Appleton et al. (2006) also emphasized the importance of the context in which these subtypes occur such as relationships with adults at school, encouragement from family members, and support from peers. In addition, they wrote that while the majority of research has been directed towards the academic and behavioral components of student engagement since they tend to lend themselves to more precise observation, "measuring cognitive and psychological engagement is relevant because there is an overemphasis in school practice on indicators of academic and behavioral engagement. Such overemphasis ignores the budding literature that suggests that cognitive and psychological engagement indicators are associated with positive learning outcomes, related to motivation, and increase in response to specific teaching strategies" (p. 431). The Student Engagement Instrument was developed to measure both cognitive and psychological engagement, which has subsequently been labeled affective engagement (Appleton et al., 2008).

The International Center for Leadership in Education (ICLE), which researched and developed a model of teaching based on the concepts of rigor and relevance, advanced the view that student engagement is an essential underpinning of these dimensions of the learning process (Jones, Marrazo, & Love, 2007). Jones (2009) asserted that while student engagement is not an exact science, it can be planned, measured and enriched. He described student engagement as the:

Positive behaviors that indicate full participation by the student in the learning process. When students are engaged, we can hear, see, or feel their motivation in completing a task, taking pride in their work, or going beyond the minimum work required. Engaged students demonstrate a feeling of belonging by the way they act, the positive things they say about school, and through their passionate involvement in class activities. (p. 1)

Based on a review of the literature and research conducted by ICLE Jones identified those factors that contribute to a school milieu in which student engagement is nurtured. Many of these factors are similar to those described above for the mindset of motivated, resilient learners. They include:

- 1. Interactions between and among students, teachers, administrators, parents, etc. are respectful, collegial, and warm.
- 2. There is an atmosphere of mutual accountability; people feel a sense of responsibility to one another and to the larger school community.
- 3. Signs of positive community identify and a sense of belonging permeate the school.
- 4. Students take leadership roles in representing and "owning" the school, exhibiting energy and enthusiasm about their institution.
 - 5. The physical space is clean and safe.
- 6. Regular forums, structures, and interactions acknowledge and celebrate school and individual success.
- 7. The school actively involves and engages family and community members in the life of the school.
- 8. The school promotes and supports student activism by helping students engage in community change. (pp. 37-38)

Commonalities Among Motivation, Engagement, and Resilience

If educators are to nurture motivation, engagement, and resilience in students, they should attend to and reinforce the common components associated with the mindset of each of these concepts. There are many commonalities, especially if the underpinnings of intrinsic motivation as opposed to extrinsic motivation are used in the comparison. A summary of the common beliefs (mindset) are included in Table 1.

* * * Table 1 belongs here * * *

It is important to emphasize that each of the beliefs listed in Table 1 are part of the foundations of student engagement, motivation, and resilience. They are also part of a student's mindset and therefore open to reinforcement. Teachers who are most effective in reinforcing these beliefs in students and thereby creating a school climate in which motivation, engagement, and resilience are nurtured are guided by their own specific beliefs and mindsets, a topic to which we now turn.

Educators Beliefs and Practices

The Mindset of Effective Educators

A consideration of the mindset of students who are motivated, engaged, and resilient invites several other questions, including two listed earlier: What are the characteristics of the mindset of educators who are most effective in nurturing motivation, engagement, and resilience in students? What specific strategies or interventions can teachers with positive mindsets develop and implement to nurture motivation, engagement, and resilience in their classrooms?

It is essential for educators to appreciate that the assumptions they hold for themselves and their students, often unstated, have profound influence in determining effective teaching practices, the quality of relationships with students, and the positive or negative climate that is created in the classroom and school building. It is also essential that teachers discuss and examine the mindsets of effective, motivated learners and consider how to nurture this mindset in the classroom.

The following are assumptions and beliefs held by educators about students that appear most likely to eventuate in practices that nurture student motivation, engagement, and resilience (Goldstein & Brooks, 2007):

- 1. To appreciate that they have a lifelong impact on students, including on their sense of hope and resilience.
- 2. To believe that the level of motivation and learning that occurs in the classroom and the behavior exhibited by students has as much, if not more, to do with the influence of teachers than what students might bring into the situation.
- 3. To believe that all students yearn to be successful and if a student is not learning, educators must ask how they can adapt their teaching style and instructional material to meet student needs.
- 4. To believe that attending to the social-emotional needs of students is not an "extra-curriculum" that draws time away from teaching academic subjects, but rather a significant feature of effective teaching that enriches learning.
- 5. To recognize that if educators are to relate effectively to students, they must be empathic, always attempting to perceive the world through the eyes of the student and considering the ways in which students view them.
- 6. To appreciate that the foundation for successful learning and a safe and secure classroom climate is the relationship that teachers forge with students.

- 7. To recognize that students will be more motivated to learn and more engaged in the classroom when they feel a sense of ownership or autonomy for their own education.
- 8. To understand that one of the main functions of an educator is to be a disciplinarian in the true sense of the word, namely, to perceive discipline as a teaching process rather than as a process of intimidation and humiliation. Disciplinary practices should reinforce self-discipline, which is a critical behavior associated with resilience
- 9. To realize that one of the greatest obstacles to learning is the fear of making mistakes and feeling embarrassed or humiliated and to take active steps to minimize this fear.
- 10. To subscribe to a strength-based model, which includes identifying and reinforcing each student's "islands of competence."
- 11. To develop and maintain positive, respectful relationships with colleagues and parents.

Themes and Exercises to Nurture a Positive Mindset in Educators

Information can be imparted to teachers and exercises can be introduced to articulate and reinforce these beliefs associated with nurturing student motivation, engagement and resilience. The goal is for all faculty and staff in a school to share within reason a common perspective or mindset. The following are suggested themes for discussion and exercises to facilitate this task:

The focus on a student's social/emotional development and well-being is not an extra curriculum that takes time away from teaching academic skills and content. As we noted earlier in this chapter, it is unfortunate that a dichotomy has arisen in many educational quarters prompting some educators to perceive that attending to a student's emotional and social health is mutually exclusive from the goal of teaching academic material. This dichotomy has been fueled, in part, by the emergence of high stakes testing and an emphasis on accountability. The following refrain is heard in many schools: "We barely have time to get through the assigned curriculum. We really don't have the time to focus on anything else."

We are not opposed to assessment or accountability. We welcome research conducted to define effective teaching practices. However, what we question is relegating a student's emotional life to the background and not appreciating its important role in the process of learning. This attitude was captured at one of our workshops. A high school science teacher challenged our viewpoint by contending: "I am a science teacher. I know my science and I know how to convey science facts to my students. Why should I have to spend time thinking about a student's emotional or social life? I don't have time to do so and it will distract me from teaching science."

While many teachers and school administrators would take issue with the views expressed by this science teacher, others might not. We believe that strengthening a student's feeling of well-being, self-esteem, and dignity is not an extra curriculum. If anything, a student's sense of belonging, security, and self-confidence in the classroom provides the scaffolding that supports the foundation for enhanced learning, engagement, motivation, self-discipline, responsibility, and the ability to deal more effectively with obstacles and mistakes (Brooks, 1991, 2004; Cohen, 2006; Cohen & Sandy, 2003; Elias, Zins, Graczyk, & Weissberg, 2003).

To highlight this point, educators can be asked to reflect on their own teachers and think about those from whom they learned most effectively. It has been our experience that the teachers they select are those who not only taught academic content but, in addition, supported the emotional well-being of students and were interested in the "whole child." Very importantly, as educators reflect upon their teachers as well as their own teaching practices, they can be asked to consider the following question: "Do you believe that developing a positive relationship with your students enhances or detracts from teaching academic material? Please offer examples."

Examples should be encouraged whether the answer is yes, no, or maybe. It is important for educators to give serious consideration to this question. In our experience, most educators are able to offer examples of "small gestures" on their part (or on the part of their teachers) that took little, if any, time, but communicated to students a message of respect and caring (Brooks, 1991). If teachers contend they would like to develop more meaningful relationships with students, but are unable to allot the time to do so, other educators who have been able to accomplish this task can offer specific suggestions.

Educators have a lifelong impact on students and their resilience. Closely associated with this previous point is the belief of teachers that what they say and do each day in their classroom can have a lifelong influence on their students (Brooks, 1991; Brooks & Goldstein, 2001). While most teachers appreciate that they are and will continue to be influential in the lives of their students for years to come, many are not aware of the extent of their impact.

It is important that teachers are acquainted with research findings from the resilience literature to highlight this impact. Such knowledge will add meaning and purpose to their role as teachers and lessen disillusionment and burnout. In the past 25 years there has been an increased effort to define those factors that help children and adolescents to deal more effectively with stress, to overcome adversity, and to become resilient (Brooks, 1994; Brooks & Goldstein, 2001; Goldstein & Brooks, 2005; Katz, 1997; Werner & Smith, 1992). We highlight that schools have been spotlighted as environments in which self-esteem, hope, and resilience can be fortified, frequently quoting the late psychologist Julius Segal (1988) who wrote:

From studies conducted around the world, researchers have distilled a number of factors that enable such children of misfortune to beat the heavy odds against them. One factor turns out to be the presence in their lives of a charismatic adult—a person with whom they can identify and from whom they gather strength. And in a surprising number of cases, that person turns out to be a teacher. (p. 3)

It is important for teachers to recognize that they are in a unique position to be a "charismatic adult" in a student's life and that even seemingly small gestures can have a lifelong impact. A smile, a warm greeting, a note of encouragement, a few minutes taken to meet alone with a student, and an appreciation of and respect for different learning styles are but several of the activities that define a "charismatic teacher" (Brooks, 1991).

Teachers are often unaware that they are or have been "charismatic adults" in the life of a student. To emphasize this issue, faculty can be asked if they have ever received unexpectedly, a note from a former student thanking them for the positive impact they had on the student's life. While many have been fortunate to be the recipient of such a note, others have not although they are equally deserving of such feedback.

We frequently ask participants at our workshops if there are teachers who had a significant influence on their lives whom they have failed to acknowledge via a note or letter. It is not unusual for many teachers to voice regret they have not thanked several such "charismatic adults." Some have written notes to the latter following the workshop.

We use these exercises to suggest that while we may not receive formal confirmation that we have worn the garb of "charismatic adults," if we approach each day with the belief that today may be the day we say or do something that directs a student's life in a more positive path, we will be more optimistic about our role, and our students will be the beneficiaries of more realistic, hopeful expectations. The belief that we can serve as "charismatic adults" serves as one of the major motivating forces described by Pink (2009) in his elaboration of SDT, namely, the existence of "purpose" in our lives.

All students wish to learn and to succeed and if they seem unmotivated or disengaged, they may believe they lack the ability to achieve in school. We often hear teachers refer to students as lazy or unmotivated. As we have noted, once these accusatory labels are used and a negative mindset dominates, educators are more likely to respond to these students with annoyance. The mindset of an effective educator constantly echoes, "I believe that all students come to school desiring to learn. It they are disinterested and feel defeated, we must figure out how best to reach and teach them."

Subscribing to this view has a profound impact on the ways in which we respond to students, especially those who are struggling. When students lose faith in their ability to learn and when feelings of hopelessness pervade their psyche, they are vulnerable to engaging in counterproductive or self-defeating ways of coping. They may quit at tasks, clown around, pick on other students, or expend little time and effort in academic requirements. When a student feels that failure is a foregone conclusion, it is difficult to muster the energy to consider alternative ways of mastering learning demands.

Teachers who observe such counterproductive behaviors may easily reach the conclusion that the student is unmotivated or lazy, or not caring about school. As negative assumptions and mindsets dominate, teachers are less likely to consider more productive strategies for reaching the student. Instead, thoughts turn to punitive actions; e.g., what punishments would finally get through to the student. However, if educators subscribe to the belief that each student wishes to succeed, negative assumptions are less likely to prevail.

A shift in perspective was obvious in a consultation Bob did about Sarah, a problematic high school student. One of her teachers began by asking, "Don't you think it's okay for a 16 1/2-year-old to drop out of school?' The agenda was clear. These teachers, who typically displayed a caring and encouraging attitude, were very frustrated and angry with Sarah to the extent of wishing her to drop out of school. The teachers elaborated that Sarah was a student who "sabotaged" all of their efforts. "Even if Sarah agrees to do something, she doesn't follow through. It's obvious that she dislikes school and she's disruptive and disrespectful. She couldn't care less about how she does in school."

As we shall see, Sarah cared a great deal about wanting to achieve in school, but entertained little hope for doing so. It was only when her teachers truly accepted that each student desperately wants to succeed that a positive mindset emerged, which permitted them to consider new solutions. A turning point occurred when Bob

empathized with the teachers about their frustration but then asked, "Can anyone tell me how you think Sarah feels each day when she enters the school building?"

After several moments of silence, one teacher responded, "How Sarah feels. I never really thought about that before." Another teacher followed, "I never really thought about that before either, but as I'm doing so now, only one word comes to mind, defeated. I think everyday when Sarah comes in to the school building she feels defeated."

As this teacher shared her observation, the shift in mindset that permeated the room was palpable, highlighted by one teacher asking Bob, "You've written a lot about helping kids be more confident and resilient in the school setting. So what can we do to help a student who feels defeated begin to feel less defeated?" A lively, creative discussion ensued, filled with ideas that had not been considered previously, including having Sarah, who relished being helpful, assist in the office. The teachers also shifted their focus from what punitive action to take to a desire to "get to know" Sarah, not via a tense, confrontational meeting but rather by having lunch with her.

This new approach prompted Sarah to be more responsible and a positive cycle was set in motion. The catalyst for this new cycle was when her teachers shifted their mindset, no longer viewing Sarah's behaviors as oppositional, but rather as a reflection of the despair and defeatism she experienced. They adopted the assumption that students wish to succeed, but at times obstacles appear on the road to success—obstacles that teachers working in concert with students could remove.

If our strategies are not effective, we must ask, "What is it that I can do differently?" rather than continuing to wait for the student to change first. A basic underpinning of motivation and resilience is the belief of "personal control," namely, that we are the "authors of our own lives" and it makes little sense to continue to do the same thing repeatedly if our actions are not leading to positive results (Brooks & Goldstein, 2004). While many educators and others say they subscribe to this assumption, their actions frequently belie their assertion. For example, it is not unusual to hear the following statements offered by educators at consultations we have conducted: "This student is unmotivated to change. She just won't take responsibility for her behavior." Or, "We've been using this strategy with this student for five months. He's still not responding. He's resistant and oppositional." We believe in perseverance, but if a staff has been employing the same approach for five months without any positive outcome, one can ask, "Who are the resistant ones here?"

As one perceptive teacher emphasized, "Asking what is it that we can do differently should not be seen as blaming ourselves but rather as a source of empowerment." She continued, "Isn't it better to focus on what we can do differently rather than continue to wait for someone else to change first? We may have to wait forever and continue to be frustrated and unhappy." This same teacher summarized her belief with the statement, "If the horse is dead, get off." We have found that there are many dead horses strewn on the grounds of a school.

The assumption of personal control should be addressed directly at staff meetings. Teachers should recognize that a change in strategy on their part is not the equivalent of "giving in" (this is a belief that often crops up), but rather as a sign that we are seeking a more productive intervention. If change on a teacher's part is interpreted as acquiescing to the student, any new strategy will be tainted by feelings of resentment.

A helpful exercise to illustrate the power of personal control and the need to change "negative scripts" that exist in our lives is to ask educators to think about one or two instances when they changed their usual script and to consider what resulted as a consequence of their new script. Many educators, such as those involved with Sarah, are able to describe very positive results. Unfortunately, others report less satisfactory results, often believing that they had gone out of their way for students, but the students did not reciprocate. When the outcome of a change in script is not positive, a problem-solving attitude should be introduced by asking, "With hindsight, is there anything you would do differently today to lessen the probability of an unfavorable result?"

The possibility that a modification of a script may not eventuate in a positive outcome should be addressed. When a new script is implemented educators should have one or two back-up scripts in mind should the first prove ineffective. Having a back-up script conveys the positive message that if a strategy that sounds promising does not yield the results we wish, rather than feel exasperated or defeated, we should learn from the experience and be prepared with alternative actions. We must keep in mind that a new script may create the conditions that encourage students to change their behaviors.

Empathy is an essential skill for effective teaching and relationships with students as well as parents and colleagues. Empathic educators are able to place themselves inside the shoes of their students and others and perceive the world through their eyes, just as Sarah's teachers attempted to do, eventually understanding that she felt defeated. Goleman (1994) highlighted empathy as a major component of emotional intelligence.

Being empathic invites educators to ask, "Would I want anyone to say or do to me what I have just said or done to this student (or parent or colleague)?" or "Whenever I say or do things with students (parents or colleagues), what is my goal and am I saying or doing these things in a way that my students will be most likely to hear and respond constructively to my message?"

As an example, a teacher may attempt to motivate a student who is not performing adequately by exhorting the student to "try harder." While the teacher may be well-intentioned, the comment is based on the assumption that the student is not willing to expend the time and energy necessary to succeed. Thus, such a remark is frequently experienced as accusatory and judgmental. When students feel accused, they are less prone to be cooperative. Consequently, the teacher's comment is not likely to lead to the desired results, which, in turn, may reinforce the teacher's belief that the student is unmotivated and not interested in "trying." In contrast, an empathic teacher might wonder, "If I were struggling in my role as a teacher, would I want another teacher or my principal to say to me, 'If you just tried a little harder you wouldn't have this problem'?" When we have offered this question at workshops, many teachers laugh and say they would be very annoyed if they were accused of not trying. The question prompts them to reflect upon how their statements are interpreted by their students.

There are several exercises that can be introduced at staff meetings to reinforce empathy. A favorite is to have teachers think of a teacher they liked and one that they did not like when they were students and then to describe each in several words. Next, they can be reminded, "Just as you have words to describe your teachers, your students have words to describe you." They can then consider these questions: What words would you hope your students used to describe you? What have you done in the past month so they

are likely to use these words? What words would they actually use to describe you? How close would the words you hope they use parallel the words they would actually use? (One teacher jokingly said, "I would love my students to use the word 'calm," but I don't think they would since I feel I have been raising my voice a great deal the past month or two and not showing much patience.")

Another exercise that educators have found useful in reinforcing empathy revolves around our own memories of school. Teachers can be requested at workshops to share with their colleagues their response to the following questions:

- Of all of the memories you have as a student, what is one of your favorite ones, something that a teacher or school administrator said or did that boosted your motivation and self-dignity?
- Of all of the memories you have as a student, what is one of your worst ones, something that a teacher or school administrator said or did that lessened your motivation and self-dignity?
- As you reflect upon both your positive and negative memories of school, what did you learn from both and do you use these memories to guide what you are doing with your students today?

Recounting one's own positive and negative memories of school with one's colleagues often proves very emotional and leads teachers to ask: What memories are my students taking from their interactions with me? Are they the memories I would like them to take? If not, what must I change so that the memories they will take will be in accord with the memories I hope they take? These exercises to nurture empathy often prompt teachers to consider how best to obtain feedback from students to gain a realistic picture of how they are perceived. We will address this question in the next point.

Ongoing feedback and input from students enhances empathy and promotes a sense of engagement, responsibility, and ownership in students. Effective teachers not only welcome the input of students, but they appreciate that such input must be incorporated on a regular basis. When students feel their voice is being heard, they are more likely to be engaged in academic requirements, work more cooperatively with teachers, and demonstrate greater motivation to meet academic challenges. Eliciting student opinion reinforces a feeling of personal control and responsibility—essential ingredients of a positive school climate; encouraging student input is also a basic feature of motivation, engagement, and resilience (Adelman & Taylor, 1983; Cohen, 2006; Deci, Hodges et al., 1992; DiCintio & Gee, 1999; Henderson & Milstein, 1996; Jacobson, 1999; Thomsen, 2002).

There are various ways for teachers to obtain student feedback and input. For instance, teachers can request anonymous feedback from students. One high school teacher asked students to draw him, describe him, list what they liked about his teaching style and the class, and what they would recommend he change. While one of his colleagues scoffed at this practice, contending that such feedback was not important and took valuable time from teaching, the outcome of the exercise proved the colleague wrong. The exercise actually increased achievement scores and cooperation; this was not surprising since the students felt respected. Another teacher requested that students complete a one-page report card about him whenever he filled out report cards on them. The students actually developed the report card, which evaluated the teacher on such

dimensions as discipline style, response to student questions, teaching style, and fairness towards all students. Recommendations for change were elicited.

Ownership in students can also be reinforced by engaging students in a discussion about the benefits or drawbacks of educational practices that are typically seen as "givens," including such activities as tests, reports, and homework. In addition, educators can strengthen a feeling of student ownership by incorporating a variety of choices in the classroom, none of which diminishes a teacher's authority but rather empowers students to feel a sense of control over their own education.

Choice and ownership can also be applied to disciplinary practices by asking students to consider such questions as:

- What rules do you think we need in this classroom for all students to feel comfortable and learn best? (It is not unusual for teachers to report that the rules recommended by students often parallel those of the teacher.)
- Even as your teacher I may forget a rule. If I do, this is how I would like you to remind me. (Teachers can then list one or two ways they would like to be reminded.) Now that I have mentioned how I would like to be reminded, how would you like me to remind you? (When students inform teachers how they would like to be reminded should they forget a rule, they are less likely to experience the reminder as a form of nagging and more likely to hear what the teacher has to say. It is easier for students to consider ways of being reminded if teachers first serve as models by offering how they would like to be reminded.)
- What should the consequences be if we forget a rule? (We have heard teachers report, especially when asking these questions to angry students, that the consequences suggested by the students are more severe than any teacher would use.)

These questions pertaining to disciplinary practices encourage a sense of ownership for rules and consequences, thereby promoting responsibility and self-discipline in students.

The second author regularly reinforces a sense of control in her therapy sessions with children who have problems in school. For instance, Anna, an 8-year-old, was burdened by social anxiety. Although she was willing to talk with Suzanne about her interests, she became frozen whenever the discussion turned to friends and school. Her teacher told Suzanne that Anna frequently struggles to enter groups of two or more children, particularly on the school playground. Suzanne applied a very effective, well-known therapeutic technique involving the use of "displacement." She told Anna that she knew a little boy who was having a problem talking with friends and didn't know how to help him. Anna immediately replied, "Does he have a hard time on the playground?" Suzanne responded, "Yes, the playground is where he has the most trouble."

Anna continued, "Is he scared to talk with other children?" Eventually, the discussion led her to assert, "I think he might be worried they will make fun of him." Once this worry was verbalized, Suzanne engaged Anna in considering strategies for helping the boy deal with his problems, which, of course, were the same strategies that Anna could implement to deal with her own problems. In essence, Anna was placed in a position of control, which encouraged her to discuss her own struggles more directly, leading to a lessening of her anxiety.

Each student has different "islands of competence" and learning styles that must be identified, respected, and reinforced. This belief is at the core of a strength-based approach to education and overlaps with many of the other points reviewed in this chapter. Effective teachers appreciate that one must move beyond a philosophy that fixates on a student's problems and vulnerabilities and affords equal, if not greater space, to strengths and competencies.

Researchers and clinicians have emphasized the significance of recruiting selected areas of strength or "islands of competence" in building self-confidence, motivation, and resilience (Deci & Flaste, 1995; Katz, 1994; Rutter, 1985). Rutter (1985), in describing resilient individuals, observed, "Experiences of success in one arena of life led to enhanced self-esteem and a feeling of self-efficacy, enabling them to cope more successfully with the subsequent life challenges and adaptations" (p. 604). Katz (1994) noted, "Being able to showcase our talents, and to have them valued by important people in our lives, helps us to define our identities around that which we do best" (p. 10).

Understanding how you learn best. One of the most obvious guideposts for assisting students to feel competent is to teach them in ways in which they can learn best. Educators must appreciate that each student has different learning strengths and vulnerabilities (Gardner, 1983; Levine, 2002). This requires that teachers familiarize themselves with such topics as multiple intelligences and learning styles.

At the beginning of the school year, teachers can meet with each student for a few minutes and ask, "What are you interested in? What do you like to do? What do you think you do well?" While some students will respond eagerly, others may simply say, "I don't know." In that case, teachers can respond, "That's okay, it often takes time to figure out what you're good at. I'll try to be of help."

When the second author evaluates students referred for learning difficulties, she always asks them how they prefer to learn. Some students are not able to answer immediately and many are surprised by the question, perhaps expecting that testing will only highlight their weaknesses. To encourage students to reflect upon their learning style, Suzanne often raises more specific questions. For example, she asked Noah, a 15-year-old high school freshman who was described by his parents as "highly intelligent and curious but completely unmotivated in school and often distracted in class," if he had ever gone on a trip that he really enjoyed and still thinks about.

Noah's expression, which had previously been rather flat and tired looking, lit up as he began to describe his trip to China with his family last summer. He talked about the landscape, the culture, and the people with much excitement. Suzanne used his response to discuss the different ways we learn and to note that he appeared to be an "experiential learner." Noah, with obvious excitement in his voice, said, "That's it. Is that why I'm so bored in class all the time?" Suzanne explained that although most of our learning occurs in the classroom, we could consider ways to supplement his learning with hands on experiences once he reaches high school to make school feel less boring. Noah loved this idea and as it turned out, the high school he will attend has a practicum option for students, which connects what they are learning in the classroom with real life experiences. By asking Noah how he learned best, Suzanne was not only able to understand his struggles more clearly, but in addition was able to develop a plan that would in essence adapt more traditional teaching methods to fit with his learning style.

By encouraging his input, she also reinforced his sense of ownership in the school environment.

A high school teacher noted that given all of the students attending his classes, he did not have the time to meet with each individually at the beginning of the year. Instead, he devised a questionnaire that he sent out to each student a week before school began. He told them that it was not mandatory that they complete the questionnaire, but if they did it would help him to be a more effective teacher. The questionnaire focused on a number of areas, several of which asked students to list what they perceived to be their strengths and weaknesses and how they learned best. In the seven years in which he has sent out the questionnaire, not one student has failed to return it. This teacher found the information he obtained to be an invaluable resource in connecting with students.

Providing opportunities to help others. Another strategy to enhance a sense of competence is to provide students with an opportunity to help others. Students experience a more positive attachment to school and are more motivated to learn if they are encouraged to contribute to the school milieu (Brooks, 1991; Rutter, 1980; Werner, 1993). Examples include: older students with learning problems reading to younger children; a hyperactive child being asked to assume the position of "attendance monitor," which involved walking around the halls to take attendance of teachers while the latter were taking attendance of students; and the use of cooperative learning in which students of varying abilities work together as a team bringing their own unique strengths to different projects.

Lessening the fear of failure. One of the most powerful approaches for reinforcing a feeling of competence in students is to lessen their fear of failure. Many students equate making mistakes with feeling humiliated and consequently, will avoid learning tasks that appear very challenging. There are students who would rather be bullies or quit at tasks or assert the work is dumb rather than engage in a learning activity that they feel may result in failure and embarrassment. In a desperate attempt to avoid failure, they journey down a path that takes them farther away from possible success.

The fear of making mistakes and failing permeates every classroom and if it is not actively addressed it remains an active force, compromising the joy and enthusiasm that should be part of the learning process. Effective educators can begin to overcome the fear of failure by identifying and openly addressing it with students. One technique for doing so is for teachers to ask their class at the beginning of the school year, "Who feels they are going to make a mistake and not understand something in class this year?" Before any of the students can respond, teachers can raise their hand as a way of initiating a discussion of how the fear of making mistakes affects learning.

It is often helpful for teachers to share some of their own anxieties and experiences about making mistakes when they were students. They can recall when they were called upon in class, when they made mistakes or when they failed a test. This openness often invites students to share some of their thoughts and feelings about making mistakes. Teachers can involve the class in problem solving by encouraging them to suggest what they can do as teachers and what the students can do as a class to minimize the fear of failure and appearing foolish. Issues of being called on and not knowing the answer can be discussed.

One middle school English teacher frequently uses a method he refers to as "playing dumb" when he is seeking their responses to a book that was read. He starts by

saying, "I completely forgot what happens in the end, does anyone remember?" He has found that this question is typically followed by an enthusiastic show of hands with students explaining the ending to their teacher. Although his questioning may seem contrived, this technique empowers students to take risks through the acknowledgement that even teachers can forget information and make mistakes. Effective teachers recognize that when the fear of failure and humiliation are actively addressed in the classroom, students will be more motivated to take realistic risks and to learn.

To realize that one must strive to become stress hardy rather than stressed out. At the conclusion of one of our workshops, a teacher said, "I love your ideas, but I'm too stressed out to use them." While the remark had a humorous tone, it also captured an important consideration.

At first glance the remark seems paradoxical since numerous educators have informed us that the strategies we advocate do not take time away from teaching, but rather help to create a classroom environment that is more conducive to learning and less stressful. Yet, we can appreciate their frustration that change requires additional time, a commodity that is not readily available. Some are hesitant to leave their "comfort zone" even when this zone is filled with stress and pressure. They would rather continue with a known situation that is less than satisfying than engage in the task of entering a new, unexplored territory that holds promise but also uncertainty.

If educators are to be effective in applying many of the ideas described in this chapter for nurturing motivation, engagement, and resilience in students, they must venture from their "comfort zone" by utilizing techniques for dealing with the stress and pressure that are inherent in their work. Each teacher can discover his or her own ways for managing stress. For instance, some can rely on exercise, others on relaxation or meditation techniques, all of which can be very beneficial. In addition to these approaches there has been research conducted by Kobasa and her colleagues (Kobasa et al., 1982; Kobasa & Puccetti, 1983) under the label of "stress hardiness" that examines the characteristics or mindset of individuals who experience less stress than their colleagues while working in the same environment. Kobasa's work has been applied to the teaching profession (Holt, Fine, & Tollefson, 1987; Martinez, 1989).

This mindset involves three interrelated components: commitment, challenge, and control ("3C's"). When we describe them at our workshops we encourage educators to reflect upon how they might apply this information to lessen stress and burnout.

The first C represents "commitment." Stress hardy individuals do not lose sight of why they are doing what they are doing. They maintain a genuine passion or purpose for their work, which as we have seen is a critical dimension of intrinsic motivation. While we may all have "down" days, it is sad to observe educators who basically say to themselves each morning in a resigned way, "I've got to go to school. I've got to see those kids." Once a feeling of "I've got to" or "being forced to" pervades one's mindset, a sense of commitment and purpose is sacrificed, replaced by feelings of stress and burnout. As an antidote to burnout, a staff meeting might be dedicated to sharing why one became a teacher, a school administrator, a counselor, a nurse, or a psychologist. Such an exercise helps staff to recall and invigorate their dreams and goals.

The second C is for "challenge." Educators who deal more effectively with stress have developed a mindset that views difficult situations as opportunities for learning and growth rather than as stress to avoid. For example, a principal of a school faced a

challenging situation. Her school was located in a neighborhood that had changed in a few short years from a middle class population with much parent involvement to a neighborhood with a lower socioeconomic make-up and less parent involvement. There were several key factors that contributed to the decrease in parent involvement, including less flexibility for many parents to leave work in order to attend a school meeting or conference as well as many parents feeling unwelcome and anxious in school based upon their own histories as children in the school environment.

Instead of bemoaning this state of affairs and becoming increasingly upset and stressed, this particular principal and her staff realized that the education of their students would be greatly enhanced if parents became active participants in the educational process; consequently, they viewed the lack of involvement as a challenge to meet rather than as a stress to avoid. Among other strategies, they scheduled several staff meetings in the late afternoon and moved the site of the meetings from the school building to a popular community house a few blocks away. These changes encouraged a number of the parents to attend the meetings since the new time was more accommodating to their schedules and the new location helped them to feel more comfortable since it was held on their "turf." The relationship between parents and teachers was greatly enhanced and the children were the beneficiaries.

The third C is "control" or what we earlier referred to as "personal control" since some individuals may mistakenly view the word control as a form of controlling others. Control, as used in stress hardiness theory, implies that individuals who successfully manage stress and pressure focus their time and energy on factors over which they have influence rather than attempting to change things that are beyond their sphere of control. Although many individuals believe they engage in activities over which they have influence or control, in fact, many do not. We worked with a group of teachers who were feeling burned out. We reviewed the basic tenets of stress hardiness theory and asked if they focused their energies on factors within their domain of control. They replied in the affirmative.

We then asked them to list what would help their jobs to be less stressful. Their answers included, "If the students came from less dysfunctional families, if they came to school better prepared to learn, if they had more discipline at home." After a few moments one of the teachers smiled and said, "We first said that we focus on what we have control over, but everything that we are mentioning to help us feel less stressed are things over which we have little control." After the teacher said this, the group engaged in a lively discussion focusing on what educators might do to create classroom climates that nurtured learning and engagement even if the students came from home environments that were less than supportive of education. One teacher astutely noted, "We are expecting our students to come to school excited about learning and when they do not we get frustrated and annoyed. Instead, what I'm hearing is that we must ask, 'What can we do differently to help motivate students who are not motivated and what can we do to help students who feel hopeless about learning to feel more hopeful." As the discussion continued, the teachers recognized that by focusing on what they could do differently to improve the learning environment was empowering and lessened stressful feelings. The mood of pessimism and burnout that had pervaded the room began to change.

Concluding Thoughts

The concept of mindsets can help us to understand the underpinnings of three interrelated concepts: motivation, student engagement, and resilience. Future research can evaluate the outcome of implementing within the school culture different components of the mindset that cut across these three concepts. For instance, educators can examine the impact of introducing a mentoring system and the specific activities of the mentors (such as offered by the Check & Connect program; Sinclair et al., 2005), increasing student input and ownership by having students regularly attend parent-teacher conferences, or engaging students to contribute to the welfare of others.

When these interventions are introduced, researchers can study changes in a number of variables including: learning and achievement, student attendance, dropout rates, acts of bullying, occurrence of behavioral problems, and teacher retention. Well-researched and field-tested assessment instruments such as the Comprehensive School Climate Inventory (CSCI) developed by the National School Climate Center (formerly the Center for Social and Emotional Education—CSEE) can be used to obtain input from students, parents, and school personnel to measure changes in school climate when mindsets for motivation, student engagement, and resilience are reinforced in a systematic way (Cohen, 2006).

The more aware educators are of the mindset of motivated, engaged, resilient students and the more aware they are of their own mindset, the more capable they will be in implementing strategies to develop this mindset in all students. The result will be classroom environments filled with excitement, safety, eagerness to learn, engagement, self-discipline, respect, and resilience. Both faculty and students will thrive in such an environment.

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Table 1
Common Components or Beliefs (Mindset) Associated with Student Engagement,
Motivation, and Resilience

- I believe that adults are encouraging and supportive rather than judgmental and accusatory.
- I am connected to and welcome in the school environment.
- My opinion is respected, that I have, within reason, some say or input into my own education.
- I am accountable for my actions.
- My interests and strengths ("islands of competence") are identified and reinforced.
- Academic demands are challenging but in keeping with my abilities; my teachers and I are aware of my learning strengths and vulnerabilities.
- Mistakes are perceived as *expected* and *accepted*. I never feel criticized because of these mistakes, but rather I use mistakes as the basis for future learning.
- I am provided with opportunities to contribute to the well-being of both the school community and beyond.
- All members of the school community are respectful towards each other.